

# Implementation of decompensated cirrhosis discharge bundle: a university hospital experience

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## Background

Decompensated liver cirrhosis is a frequent reason for admission to acute medical and gastroenterology units. Over the past 2 decades, a significant rise in the prevalence of liver cirrhosis in the UK has been noted, with the major culprits being alcohol-related liver diseases, hepatitis B and C, and non-alcoholic obesity related disease.<sup>1,2</sup> It has been observed that readmissions to the hospital are common following discharge of the patients with decompensated liver cirrhosis. In order to improve the quality of discharge and reduce the readmissions a decompensated discharge bundle has been developed by the British Society of Gastroenterology (BSG) and British Association for the Study of Liver Diseases (BASL). A study revealed that the decompensated cirrhosis discharge bundle improves outcomes in the patient care.<sup>3</sup> We aimed to assess the practice in our hospital against BSG and BASL guidelines, and the impact by the implementation of the said discharge bundle.

## Methods

All those patients who were admitted with decompensated cirrhosis were included for data collection. Standard Quality Improvement model was adopted using two plan, do, study, act (PDSA) cycles. In cycle 1, discharge letters of 40 patients were assessed retrospectively against the decompensated cirrhosis discharge bundle toolkit during the months of January, February and March 2021. In cycle 2, there was reassessment of discharge letters for 40 patients during the months of April, May and June 2021 to look for any change or improvement.

## Results

In cycle 1, it was noted that only 20% of the decompensated cirrhotic patients had weight, urea and electrolytes, diuretic dose adjustment and communication with the patients recorded on the discharge letters. Hence, the bundle was introduced by displaying the awareness posters in the gastroenterology and hepatology unit, and it was discussed with the junior doctors in the board round. Additionally, emails were sent to the doctors in the gastroenterology unit regarding the discharge bundle introduction.

There was a significant improvement of results in cycle 2, where 60% of the patients with decompensated cirrhosis had the above-mentioned parameters documented in the discharge letters respectively.

## Conclusion

There were inconsistencies in the discharge letters when assessed during PDSA cycle 1 and the documentation was suboptimal. However, the introduction of the discharge bundle during cycle 2 in the hospital has led to a significant improvement in the discharge letter documentations when compared against the decompensated cirrhosis discharge bundle. In order to get much better results and to continue the improvement, we would consider the incorporation of the bundle in the trust e-library and include in junior doctor inductions. ■

## References

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- 2 NHS liver care. NHS Atlas of Variation for people with liver disease: reducing the unwanted variation to increase value and improve quality. *Right Care* 2013:1–141.
- 3 Gallacher J, Majiyagbe T, Jopson L, Johnson A, Coleman P, McPherson S. P191 Use of a decompensated cirrhosis discharge care bundle improves outcomes in patient care. *Gut* 2021;70(Suppl 1): A142–A142.

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